

ART EDUCATION ARTICLE, ACCEPTED MANUSCRIPT

TITLE: *Thinking About Art: The Role of Single-visit Art Museum Fieldtrip Programs in Visual Arts Education*

AUTHORS: Amanda Krantz and Stephanie Downey

The 2015 passing of Every Student Succeeds Act (ESSA) to replace No Child Left Behind was celebrated within the arts community (Arts Education Partnership, 2017; National Art Education Association, 2017; Walker, 2016) for embracing a “well-rounded education” that explicitly includes the arts in its definition (ESSA, 2015, p. 298). A well-rounded education is argued as necessary to prepare students for postgraduation life (U.S. Department of Education, 2019; Walker, 2016). Look at school district directives across the United States and you will find mission, vision, and strategic priorities that aspire for students to become “independent, creative, contributing members of society” (Baltimore City Public Schools, 2015, p.10); “global graduate[s]—ready for the world” (Houston Independent School District, 2016, p. 1); and “life-long learners and engaged global citizens” (Los Angeles Unified School District, 2016, p.5).

In 2009, prior to ESSA’s passage, the Institute of Museum and Library Services (IMLS) released the report “Museums, Libraries, and 21st century Skills” to underscore that museums and libraries are learning pillars that support 21st century skills, which include critical thinking and problem solving, creativity and innovation, and visual literacy, among others.¹ In the decade following the IMLS report (2009), “21st century skills” became common museum parlance. The authors of this article, evaluators working with all types of museums nationwide, received regular requests for evaluations of programs and exhibitions that foster 21st century skills.² But, while museums were working to support students’ well-rounded education as a 21st century learning pillar, the evidence of a museums’ impact on

students were lacking (Terrassa et al., 2016). Two independent studies about the effects of single-visit art museum fieldtrip programs, art museums' most common outreach to schools (RK&A, 2015), provide such evidence. In this article, we present the results of these two studies along with a description of art museum pedagogy.

Art Museum Pedagogy: Teaching Students to Think About Art

Current art museum pedagogy provides students the opportunity to look at and dialogue about a variety of artworks (Burnham & Kai-Kee, 2011). The shift towards dialogue has happened over the past 3 decades as museums have rejected teaching strategies that perceive learners as empty vessels to be filled.³ Rather, museums have aimed to tap into what scholar Emilie Sitzia (2018) described as “progressive pedagogical sites” (p. 73.):

Learning spaces where the knowledge produced is not reduced to the acquisition of information but also encompasses the development of diverse individual cognitive skills, such as analytical or critical skills, diverse individual emotional skills, such as empathy or creativity, a variety of psychomotor skills, such as looking at and moving around artworks, as well as social skills related to communication. (p.74)

Increasingly, art museums have employed inquiry-based teaching methods (Hein, 1998; RK&A, 2015; Terrassa et al., 2016). The two most popular inquiry-based teaching methods used are Visual Thinking Strategies (<https://vtshome.org>) and Artful Thinking Routines (<https://pzartfulthinking.org>). Notice that “thinking” is indicated in both teaching strategies, as these routines were developed to support students to *think* about art as opposed to expecting students to *absorb* art historical information.

In inquiry-based teaching, such as Visual Thinking Strategies and Artful Thinking Routines, the educator asks open-ended questions to elicit thoughts from students that are grounded in what they observe or see in the artwork (Figure 1). Some inquiry-based teaching

is constructivist, meaning dialogue is directed by student interests—a democratizing teaching approach (Hein, 1998). By comparison, some inquiry-based teaching is directed by the educator to specifically exercise students’ thinking in areas such as critical or creative thinking. For instance, in fieldtrip programs where art museum educators aim to support students’ critical thinking, which includes evidential reasoning, an art museum educator will ask students follow-up questions about their observations to justify their explanations, such as “What do you see that makes you think that?” On a fieldtrip program designed to support creative thinking, art museum educators may rely on questions such as, “What do you wonder about this work of art?” Educators may use a mix of inquiry-based teaching strategies—constructivist approaches to support student agency and directed approaches to exercise thinking skills (RK&A, 2015).

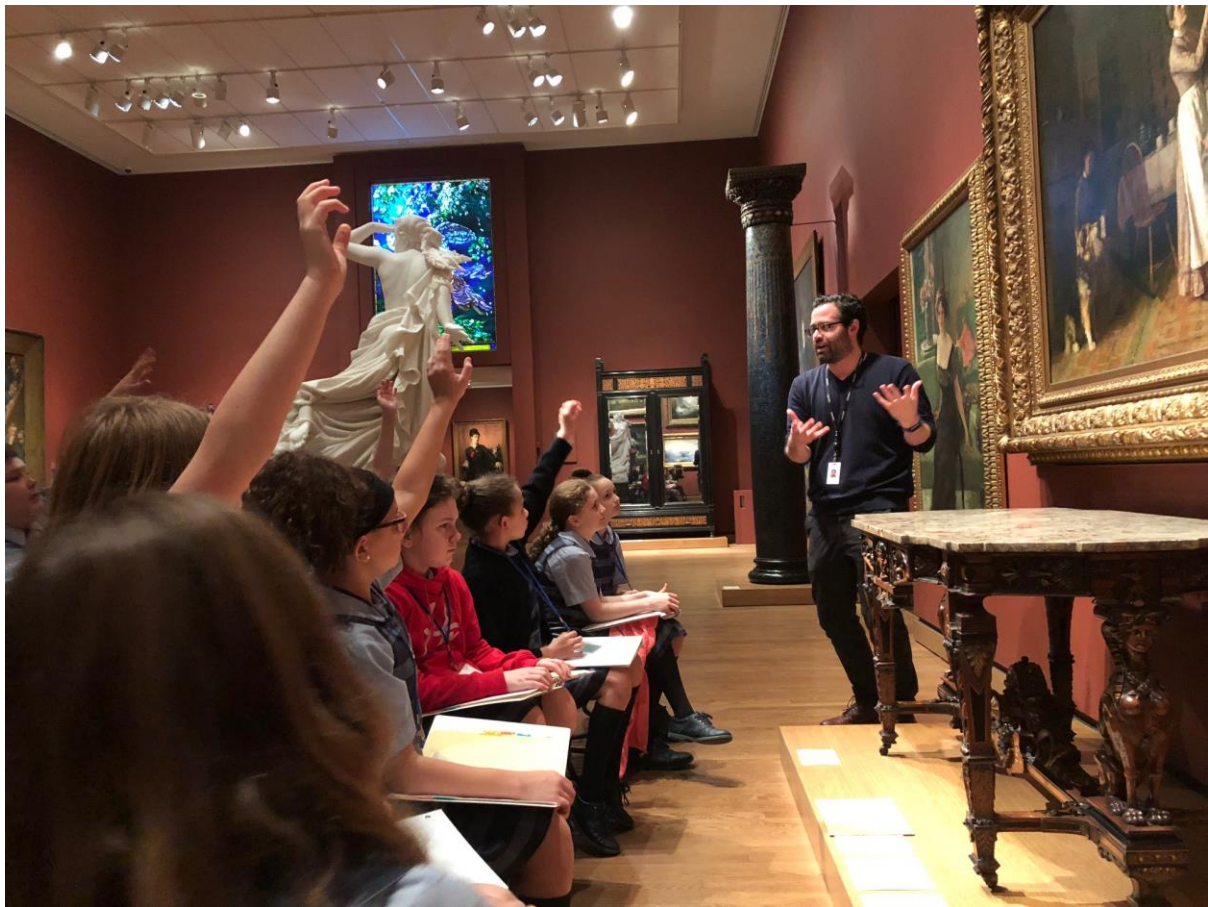


Figure 1. Philadelphia Museum of Art’s Adam Rizzo leading students in dialogue

We consider inquiry-based teaching with artworks a distinct asset of art museum teaching in the education landscape. While art teachers value discussion-based teaching in school, they often prioritize art making with the little time they have with students (Huard, 2017). That is not to say dialogic approaches are not utilized in art classrooms—it is that they are used less often in art classrooms than in art museums (Loh, 2015).

The Effects of Art Museum Pedagogy on Students

Over the past decade, studies have explored the efficacy of art museum teaching on students. Some of the studies are published and widely available, while other work is shared only within the museum that contracted the research or evaluation and at professional conferences. Studies have largely focused on multivisit art museum programs in which students engage with an art museum multiple times. Sometimes students visit the museum a few times, and sometimes they experience a combination of museum and classroom visits (Terrassa et al., 2016). Studies have shown that these multivisit programs can benefit students, particularly in their critical thinking (Adams et al., 2007; Curva and Associates, 2005; Housen, 2002; RK&A, 2007; 2010; 2014b), a skill which received much research attention in the 2000s. But multivisit programs require a significant commitment from participating schools, as well as considerable resources from the art museum offering such programs.

By comparison, single-visit programs or one-time fieldtrips to art museums require a smaller commitment from schools. For this reason, facilitated single-visit programs are the most common way art museums serve K-12 students (RK&A, 2015). Yet, there was a relative dearth of rigorous research about the effects of these one-time experiences until recently (Terrassa et al., 2016), with the publication of studies at the Crystal Bridges Museum of

American Art (Greene et al., 2014) and a national study spearheaded by the Museum Education Division of the National Art Education Association (NAEA) and the Association of Art Museum Directors (AAMD) (RK&A, 2018).⁴ Collectively, the studies show that even a one-time museum experience significantly complements the visual arts education students receive in school because the single-visit program benefits students in three capacities⁵ essential to their well-being after graduation: creative thinking, empathy, and, to some extent, critical thinking. The illustration in Figure 2 depicts our understanding of how one-time art museum programs affect students in these three capacities: creative thinking, empathy, and critical thinking. While each capacity is distinct, cognitive psychology and neuroscience indicate that they do not occur in isolation from one another—instead, they are interconnected (Terrassa et al., 2016).



Figure 2. Visualizing the effects of a single-visit art museum field trip on students

Creative Thinking

Creativity has long been associated with the arts, but there is loose agreement among academics and practitioners about what constitutes creative thinking. Processes linked to creative thinking are questioning, divergent thinking, metaphorical thinking, flexibility, play, exploration, risk-taking, imagination, and challenging conventions, among several others (Csikszentmihalyi & Robinson, 1996; Foley, 2014; Gardner, 2007; Greene, 1995).

The NAEA/AAMD study focused its exploration of creative thinking on questioning and found that students who participated in a single-visit art museum program asked more complex questions about an artwork than students who had not (RK&A, 2018). The measure for questioning emphasized the complexity of the queries—not the quantity. For instance, students who score high in questioning will ask questions that explore why something is the way it is or ask questions related to inferences they have made about the work of art. By comparison, students who score low on this measure may not ask any questions or their questions are limited to who, what, where, or when questions. The following excerpt is from an interview with a student who demonstrated accomplished levels of questioning about the Marc Chagall work of art *The Red Rooster*:

I wonder what all the characters are thinking in their head and what they actually are doing. Is this guy doing a happy song or a sad song? Is this guy trying to surprise him or something? And is this guy actually flying or is he just jumping really high? And is this guy a ghost, invisible, or just outlined? (RK&A, 2018, p. 22)

According to Socrates, true teaching and learning happens only through questions (Morrison, 2011), and the significance of questioning to learning continues to be recognized. Questioning and investigating are certainly areas that visual arts education support in school with art-making practices and are underscored in literature on art practice as a research

process (Miraglia, & Smilan, 2014; Rolling, 2013; Sullivan, 2005). This study result shows that single-visit art museum programs offer another avenue to strengthen students' creative thinking through questioning. Art museum teaching invites students to be curious and wonder about artworks, as well as about the world around them.

Empathy

Both the NAEA/AAMD and Crystal Bridges studies show that a single-visit art museum program helps students empathize and tolerate difference. In the NAEA/AAMD study, students who participated in a single-visit art museum program were more likely than those who had not to disagree with the statement, "All people should understand a work of art in the same way" (RK&A, 2018, p.24). Accepting that others may have different interpretations than one's own is an important step towards becoming receptive to others (McCarthy et al., 2004). Similarly, in the study at Crystal Bridges, students who participated in a single-visit program responded more favourably to a series of questionnaire statements related to tolerance and historical empathy, including "I think people can have different opinions about the same thing." (Greene et al., 2014, para. 22).

Evidence from both studies is particularly compelling considering that they are from visits to a variety of art museums with different collections. That is, the *pedagogy* of art museum teaching is critical to the result (RK&A, 2018) and takes precedence over the specific museum and artworks. Art museum teaching regularly helps students recognize that differences are OK and even positive. For instance, art museum educators regularly tell students there are no right or wrong answers and model openness to different interpretations when acknowledging and accepting all students' observations and inferences about an artwork. Classroom teachers who have partnered with art museums using inquiry-based

teaching laud the pedagogy specifically as being an asset to their students (National Gallery of Art, n.d.; RK&A, 2019).

Critical Thinking

Critical thinking, like creative thinking, is defined in many ways and both studies tackled different facets of critical thinking. In the NAEA/AAMD study, RK&A (2018) considered the aforementioned result about students' recognition of different interpretations as one indicator of critical thinking because doing so is part of the interpretive process. Willingham (2007) defines critical thinking as "seeing both sides of an issue [and] being open to new evidence that disconfirms your ideas" (p. 8). However, Willingham's definition also includes "deducing and inferring conclusions from available facts" (p. 8) or evidential reasoning. While evidential reasoning was something that the NAEA/AAMD study explored, RK&A (2018) did not conclude that students who experienced single-visit programs demonstrated evidential reasoning. The Crystal Bridges study (Greene et al., 2014) measured critical thinking using a combination of seven measures. While they found overall benefits for students who received a one-time fieldtrip program, the greatest difference between study groups came from the measure related to the number of observations a student made versus evidential reasoning (Kisida et al., 2016).

Nonetheless, while these studies may not show a gain in evidential reasoning, art museum teaching certainly helps students exercise and hone their critical thinking skills in other ways. Art museum educators ground dialogue in observations and routinely challenge students to provide evidence for their inferences (RK&A, 2018). Long-term exposure to these teaching strategies in multi-visit programs has been shown to benefit students in evidential reasoning (Adams et al., 2007).

The Museum Setting

The results from these two studies are evidence that students benefit from art museum teaching strategies in ways that help schools provide a well-rounded education in support of creative thinking, empathy, and, to some extent, critical thinking. While we consider the inquiry-based teaching strategies critical to the results, these studies also suggest there is something special about how the museum setting activates senses, perceptions, and emotions, which we hypothesize supports all the aforementioned capacities: creative thinking, empathy, and critical thinking.

Both the NAEA/AAMD study and the study at Crystal Bridges sought to understand the effect of the unique environment of the museum as a learning space on students. The NAEA/AAMD study results showed that students who participated in a single-visit art museum program recalled their experience more emotively than those who had a similar teaching experience in their classroom with reproductions of artworks (RK&A, 2018). And the study at Crystal Bridges found that students were able to recall tour details at very high rates (Greene et al., 2014). While more research is needed to clearly articulate the value of the emotion and recall triggered in the museum setting, many teachers recognize the inherent value.

For example, in a survey of teachers who participated in the NAEA/AAMD study, teachers most valued the art museum fieldtrip for the “awe-inspiring experience” it offered students over the opportunity to enhance their critical and creative thinking skills (RK&A, 2018). Experiencing awe and wonder is often associated with broadening perspectives, which is a motivating factor for an art museum field trip that teachers often name. One math teacher, in describing what worked best about an art museum program for his students, explained: “We are in one of the most poverty-stricken areas. It is exposure to the arts that

my kids don't get often. The lesson is great, but the exposure really does them good....There is a whole world outside" (RK&A, 2019, p. 53).

Conclusion

The two studies by NAEA/AAMD and at Crystal Bridges demonstrate that single-visit art museum fieldtrip programs support students' creative thinking, empathy, and, to some extent, critical thinking. If schools are truly committed to developing the "well-rounded child," evidence from these studies certainly demonstrates that art museum programming is important. However, school administrators may still ask whether the benefits of art museum programs outweigh the expenses, such as program fees, bussing and/or transportation, and substitute teacher compensation (RK&A, 2014a). Some museums have grants or funding to cover these expenses, but the benefits of art museum programming lead us to conclude there is a need to find solutions to better support schools and museums in subsidizing field trips to art museums, as there is something undeniably special that happens when students leave their school campuses for another place where a different kind of learning can be experienced (Figure 3).



Figure 3. Students in front of Damian Aquiles's *Infinite Time, Infinite Memory, Infinite Destiny*, 2003-2005 at the Orlando Museum of Art

REFERENCES

Adams, M., Foutz, S., Luke, J., & Stein, J. (2007). *Thinking about art: Isabella Stewart Gardner Museum school partnership program year 3 research results*. Retrieved from:

https://www.gardnermuseum.org/sites/default/files/uploads/files/Year_3_Report.pdf

American Alliance of Museum (2020). Policy issues. Retrieved from <https://www.aam-us.org/programs/advocacy/issue-elementary-and-secondary-education/>

Arts Education Partnership (2017). *The arts leading the way to student success: A 2020 action agenda for advancing the arts in education*. Retrieved from

https://aeaparts.wpengine.com/wp-content/uploads/2017_AEP_2020_Action_Agenda.pdf

Baltimore City Public Schools (2015). Baltimore City Public Schools' five-year strategic plan 2016-2020. Retrieved from

https://www.baltimorecityschools.org/sites/default/files/inline-files/BoardOfCommissioners-2015StrategicPlan_Final.pdf

Burnham, R., & Kai-Kee, E. (2011). *Teaching in the art museum: Interpretation as experience*. Los Angeles, CA: J. Paul Getty Trust.

Csikszentmihalyi, M., & Robinson, R. E. (1990). *The art of seeing: An interpretation of the aesthetic encounter*. Malibu, CA: The J. Paul Getty Trust.

Curva and Associates (2005). *Artful citizen project: Three-year project report*. Retrieved from: <https://vtshome.org/wp-content/uploads/2016/08/2Artful-Citizen-Project-Report.pdf>

Every Student Succeeds Act, Pub. L. No. 114-95 (2015). Retired from: www.congress.gov/114/plaws/publ95/PLAW-114publ95.Pdf

Foley, C. M. (2014). Why creativity? Articulating and championing a museum's social mission. *Journal of Museum Education*, 39(2), 139-151.

Gardner, H. (2007). *Five minds for the future*. Harvard Business School Press.

Greene, J.P., Kisida, B., & Bowen, D.H. (2014). The educational value of field trips. *Education Next*, 14(1), 78-86.

Greene, M. (1995). *Releasing the imagination: Essays on education, the arts, and social change*. San Francisco: Jossey Bass.

Hein, G. (1998). *Learning in the museum*. New York, NY: Routledge.

Hooper-Greenhill, E. (Ed.) (1999). *The educational role of the museum*. London & New York: Routledge.

- Housen, A.C. (2002). Aesthetic thought, critical thinking and transfer. *Art and Learning Research, 18*(1), 99-132.
- Houston Independent School District (2016). Houston Independent School District global graduate ready for the world. Retrieved from https://www.houstonisd.org/cms/lib2/TX01001591/Centricity/Domain/37172/documents/Profiles_and%20competencies.pdf
- Huard, M. (2017). The case for class discussion: Sixth-grade's exploration of El Anatsui's contemporary sculpture. *Art Education, 70*(6): 14-19.
- Institute of Museum and Library Services. (2009). *Museums, libraries, and 21st century skills*. Retrieved from: <https://www.imls.gov/assets/1/AssetManager/21stCenturySkills.pdf>
- Kisida, B., Bowen, D.H., & Greene, J.P. (2016). Measuring critical thinking: Results from an art museum field trip experiment. *Journal of Research and Educational Effectiveness, 9*(S1), 171-187.
- Loh, V. (2015). The power of collaborative dialogue. *Art Education, 68*(5): 14-19.
- Los Angeles Unified School District. (2016). "A district on the move," destination graduation, strategic plan 2016-2019. Retrieved from https://achieve.lausd.net/site/handlers/filedownload.ashx?moduleinstanceid=754&dataid=591&FileName=LAUSD_Strategic%20Plan16-17_vr19F.pdf
- McCarthy, K. F., Ondaatje, E.H., Zakaras, L. & Brooks, A. (2004). *Gifts of the muse: Reframing the debate about the benefits of the arts*. Santa Monica, CA: RAND Research in the Arts.
- Miraglia, K.M. & Smilan, C. (Eds.) (2014). *Inquiry in action: Paradigms, methodologies, and perspectives in art education research*. Reston, VA: National Art Education Association.

Morrison, D.R. (Ed.). (2011). *The Cambridge companion to Socrates*. New York, NY: Cambridge University Press.

National Art Education Association. (2017). Arts education creating student success in school, work, and life. Retrieved from <https://arteducators-prod.s3.amazonaws.com/documents/923/f2359bc2-ab56-4231-89a2-03ea9c66ab18.pdf?1489780534>

National Gallery of Art (n.d.) *Teaching critical thinking through art with the National Gallery of Art* [MOOC]. www.edx.org/course/teaching-critical-thinking-through-art-with-the-national-gallery-of-art

RK&A. (2010). *The art of problem solving*. Unpublished report. Retrieved from <https://www.guggenheim.org/wp-content/uploads/2015/11/guggenheim-research-aps-executivesummary.pdf>

RK&A. (2014a). *Audience research: Focus groups with bay area teachers*. Unpublished report. San Francisco, CA: San Francisco Museum of Modern Art.

RK&A. (2014b). *Program evaluation: Pages program*. Unpublished report. Columbus, OH: Wexner Center for the Arts.

RK&A. (2015). *Summary of results: Survey of single-visit K-12 art museum programs*. Unpublished report. Retrieved from: <https://arteducators-prod.s3.amazonaws.com/documents/172/c3f4a795-1541-486e-9110-8227db110582.pdf?1451956086>

RK&A. (2018). *Impact study: The effects of facilitated single-visit art museum programs on students in grades 4-6*. Retrieved from: <https://arteducators-prod.s3.amazonaws.com/documents/1228/8b05494b-c7e7-4927-b6a5-c32e4f84e9f3.pdf?1537883277>

- RK&A. (2019). *Summative evaluation: Sherlock program*. Unpublished report. Philadelphia, PA: Philadelphia Museum of Art.
- Rolling, J.H., Jr. (2013). *Arts-based research primer*. New York, NY: Peter Lang.
- Sitzia, E. (2018). The ignorant art museum: Beyond meaning-making. *International Journal of Lifelong Education*, 37(1): 73-87.
- Sullivan, G. (2005). *Art practice as research: Inquiry in the visual arts*. Thousand Oaks, CA; Sage.
- Terrassa, J., Hubard, O., Holtrop, E., & Higgins-Linder, M. (2016). *Impact of art museum programs on students: Literature review*. Alexandria, VA: National Art Education Association.
- U.S. Department of Education. (2019). Every Student Succeeds Act (ESSA) [Website]. Retrieved from <https://www.ed.gov/essa?src=rn>
- Walker, T. (2016). Goodbye 'core subjects,' hello 'well-rounded education.' Retrieved from <http://neatoday.org/2016/06/21/essa-well-rounded-education/>
- Willingham, D.T. (2007). Critical thinking: Why is it so hard to teach? *American Educator*, 31, 8-19.

ENDNOTES

- ¹The report from IMLS (2009) strongly suggests that museums would take on greater role in the education of the nation. In a section labelled "Critical Momentum," the report states: "President Barack Obama's push for advanced skills in our education and workforce systems has added critical momentum to the 21st century skills movement.... Not surprisingly, most of President Obama's comments surrounding 21st century skills address the role of formal education in preparing students to be prepared for today's workforce. But the Administration has also recognized the importance of out-of-school learning environments" (p. 4). Interestingly though,

while organizations like AEP (2017) and NAEA (2017), released action plans and advocacy statements around ESSA, the discussion within the museum field appears limited. The American Alliance of Museums (2020) has one statement about ESSA on its website, and a search for “ESSA” on the IMLS website produces no results.

²Since the IMLS (2009) report, RK&A and other museum researchers have completed numerous evaluations of programs and exhibitions that seek to support 21st century skills. For example, an exhibition at the Smithsonian’s National Museum of American History included 21st century “skills spots” in its National Science Foundation-funded exhibition *Places of Invention* (RK&A, 2015). In art museums, evaluations for the Isabella Stewart Gardner Museum (Adams et al., 2007) and Solomon R. Guggenheim Museum (RK&A, 2010) explored 21st century skill-building in programs. Most recently, the National Gallery of Art (2019) released a free online course on teaching critical thinking through art.

³Eilean Hooper-Greenhill (1999) describes this absorption model as a “stimulus-response approach to teaching,” which “understood the learner as ‘the empty vessel to be filled’ (p.25). Also illustrative is her description of this model as “the transmission of objective bodies of authoritative facts to passive receivers” (p. 51).

⁴Single-visit programs are studied less often than multi-visit programs particularly because securing permissions from schools can be prohibitive.

⁵The team deliberately used the word “capacities” instead of “competencies” or “skills” to acknowledge that these areas may be activated or further developed, as opposed to being mastered.